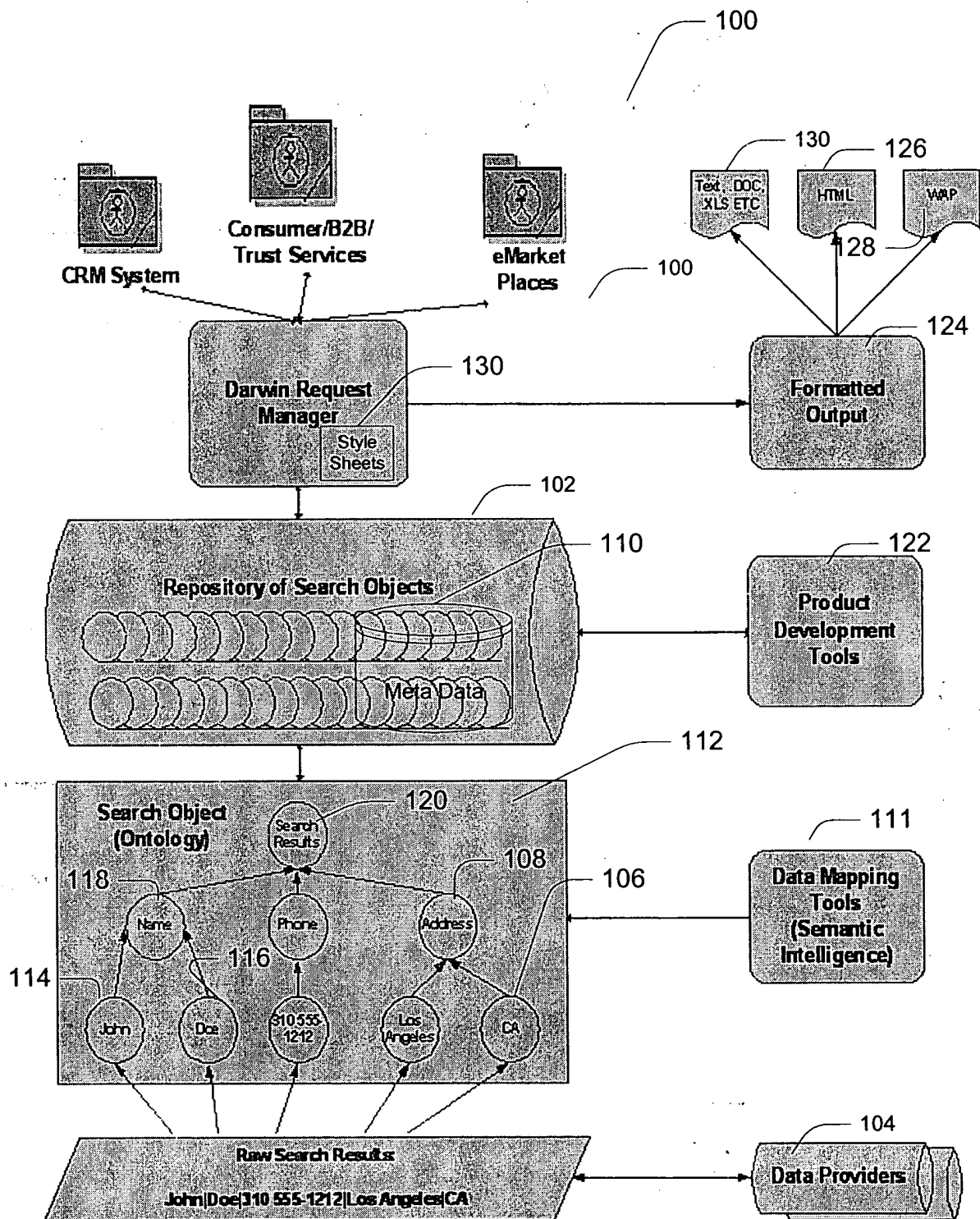


FIG. 2

FIG. 3



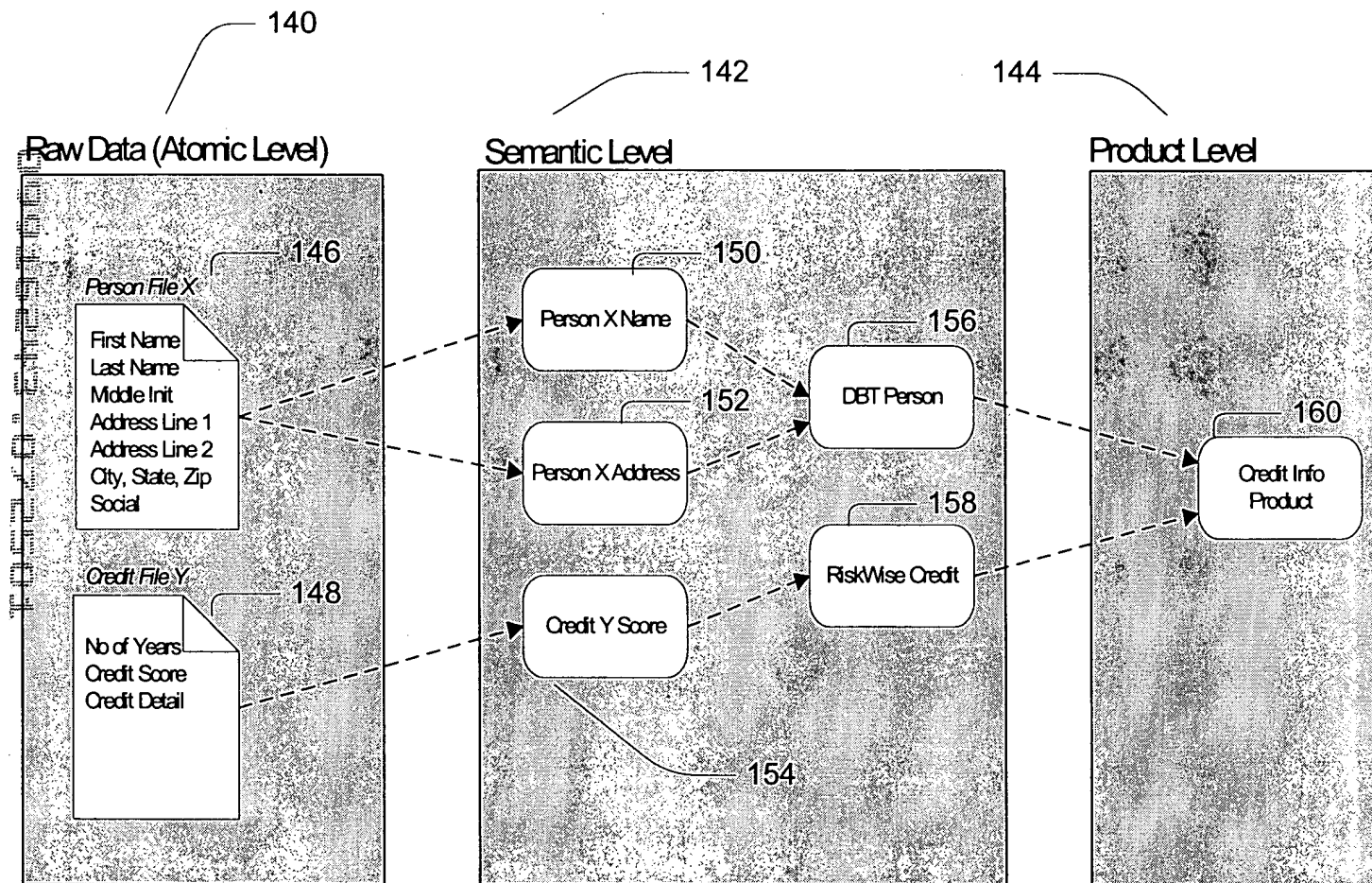


FIG. 4

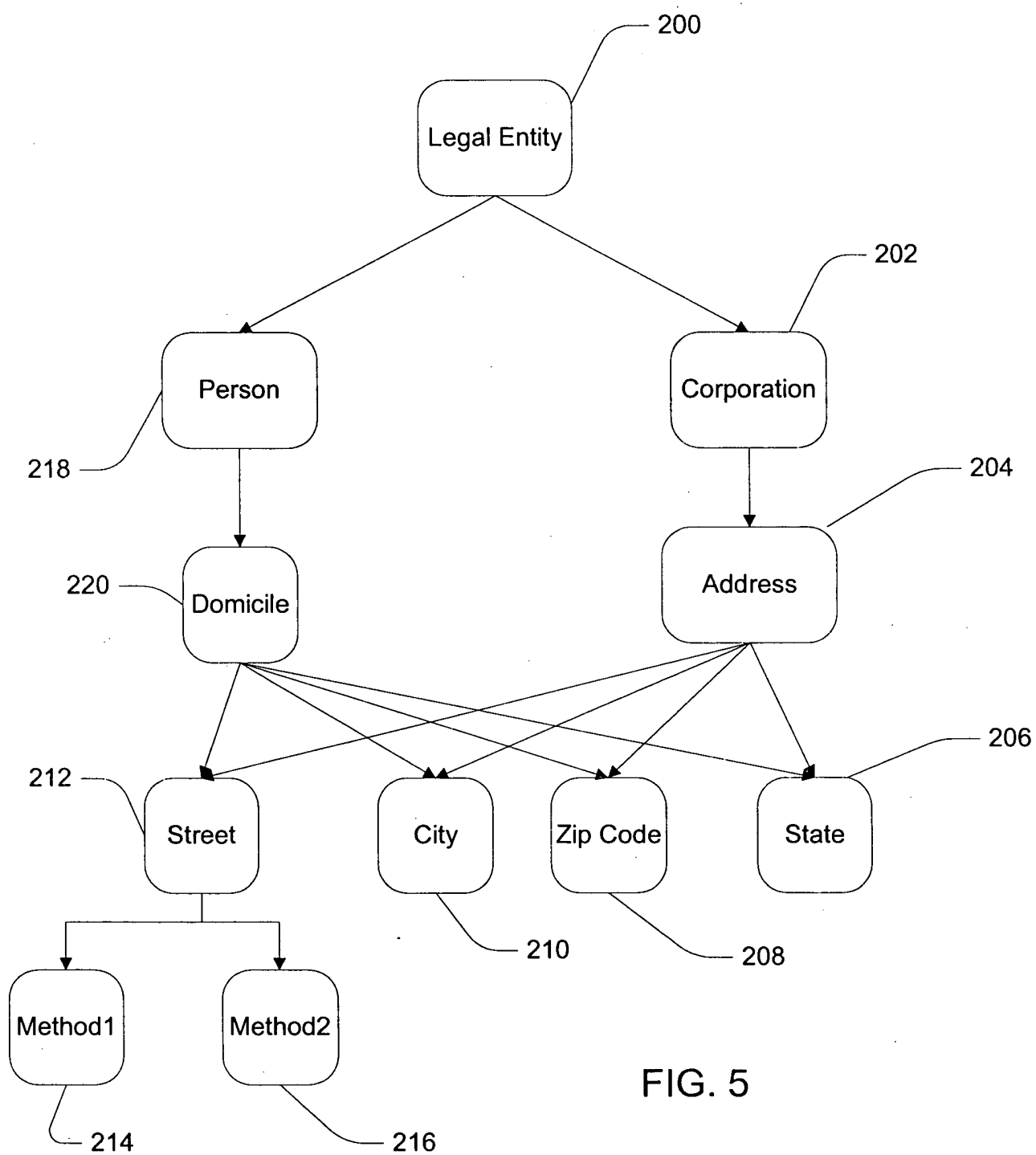


FIG. 5

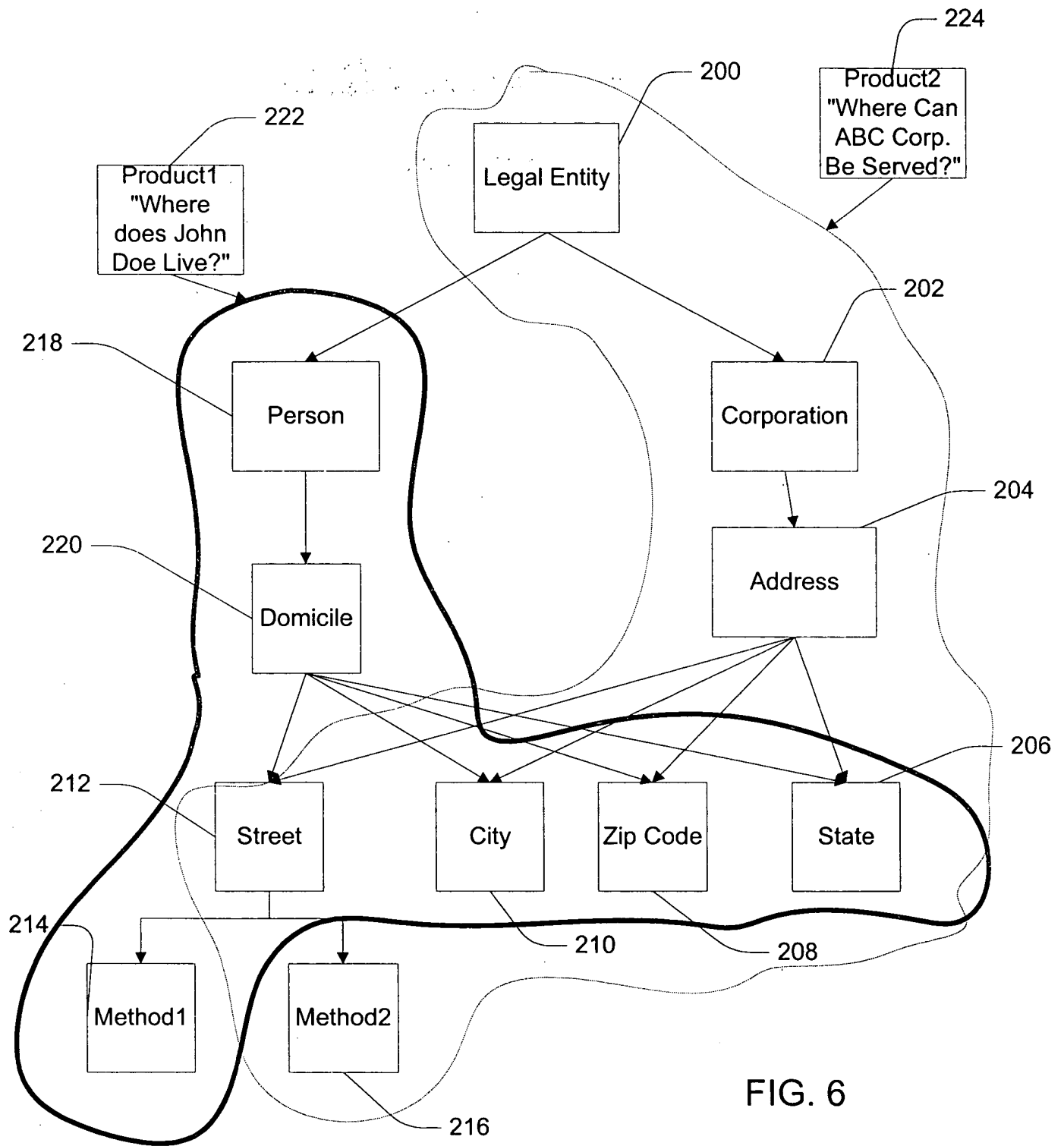


FIG. 6

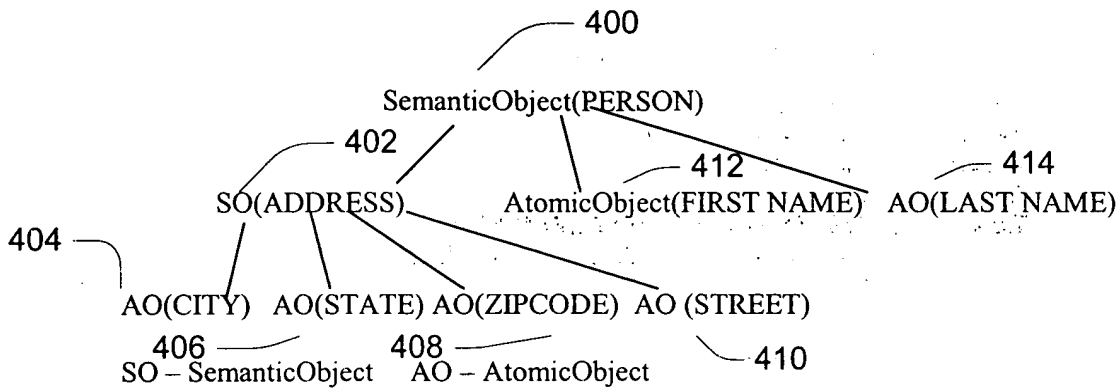


FIG. 7a

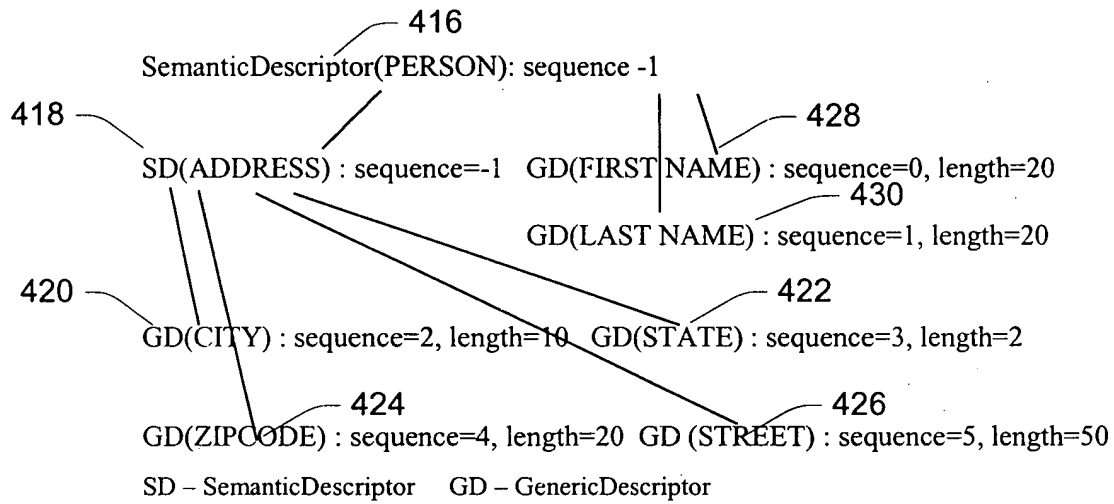


FIG. 7b

FIG. 7a

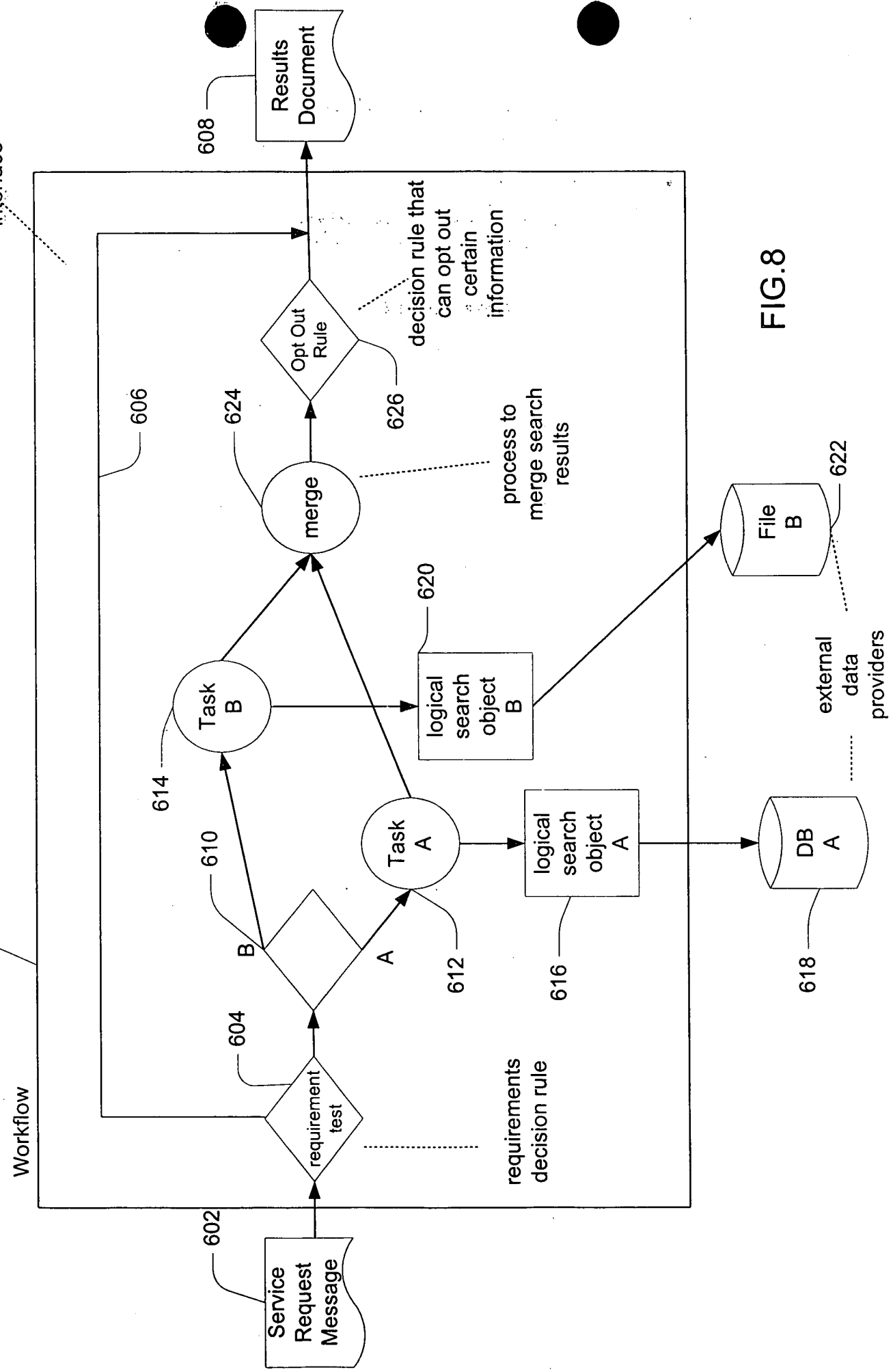


FIG.8

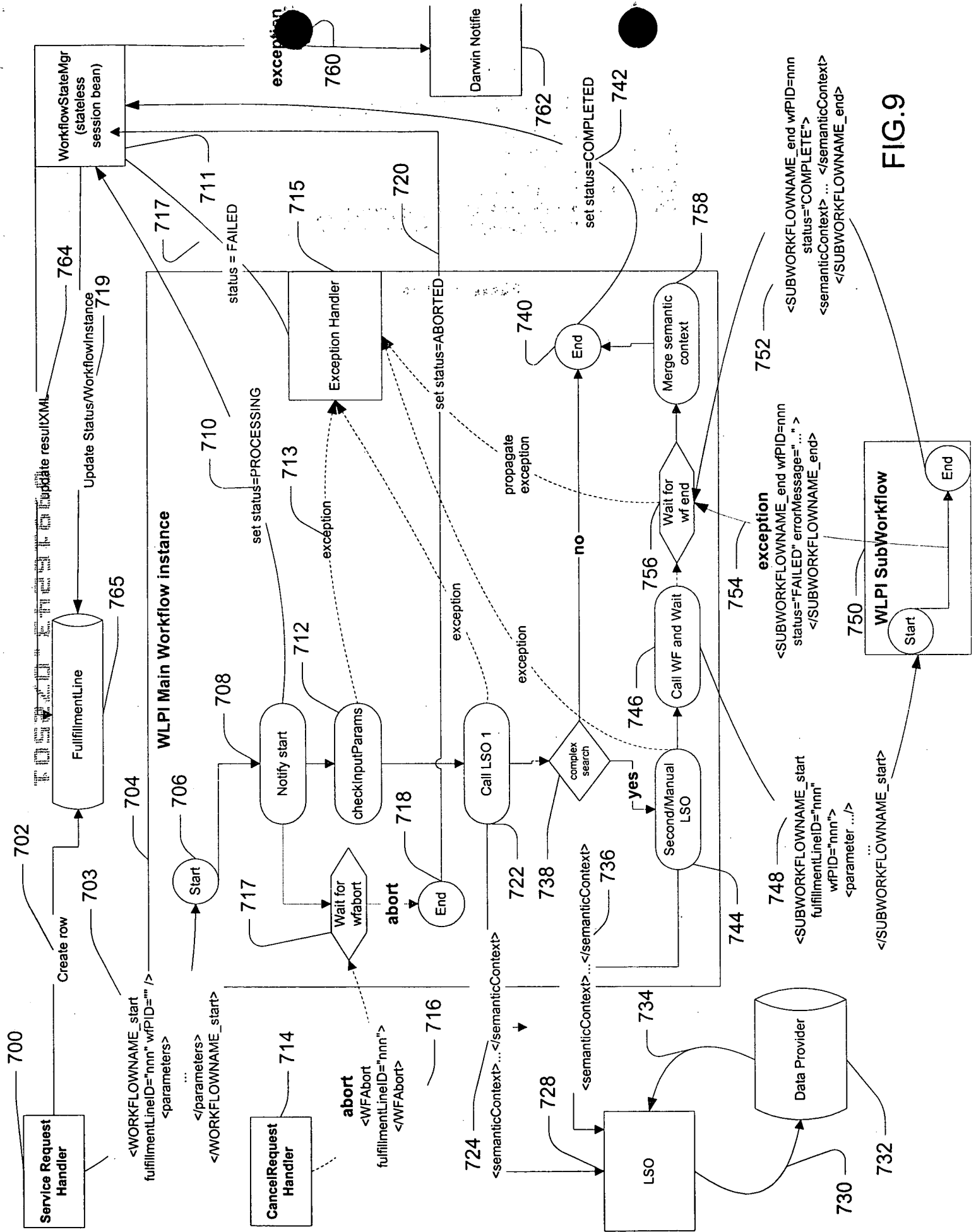


FIG.9

The flowchart illustrates the system architecture for generating a semantic network from a task. It begins with a 'Start' node leading to a 'Service Request Object' box, which contains 'Product Selection' and 'Collection Semantic Atomic Objects'. This object is processed by a 'Task' node, which then leads to a 'Service Request Object' box containing 'Product Selection', 'Collection Semantic Atomic Objects', and 'Task & Execution Status'. The 'Task' node also leads to a 'Translator' node, which is part of a larger dashed box containing 'Builder', 'Parser', 'Acquisition Adapter', and 'Connection Adapter'. The 'Translator' node is connected to the 'Builder' and 'Parser' nodes. The 'Builder' node is connected to the 'Acquisition Adapter' node. The 'Parser' node is connected to the 'Acquisition Adapter' node. The 'Acquisition Adapter' node is connected to the 'Connection Adapter' node. The 'Connection Adapter' node is connected to an 'External Data Provider' (represented by a cylinder). The 'External Data Provider' is connected to the 'Connection Adapter' node. The 'Connection Adapter' node is connected to the 'Acquisition Adapter' node. The 'Acquisition Adapter' node is connected to the 'Parser' node. The 'Parser' node is connected to the 'Translator' node. The 'Translator' node is connected to the 'Service Request Object' box. The 'Service Request Object' box is connected to a decision diamond. The decision diamond leads to 'End' or 'Next Statement'.

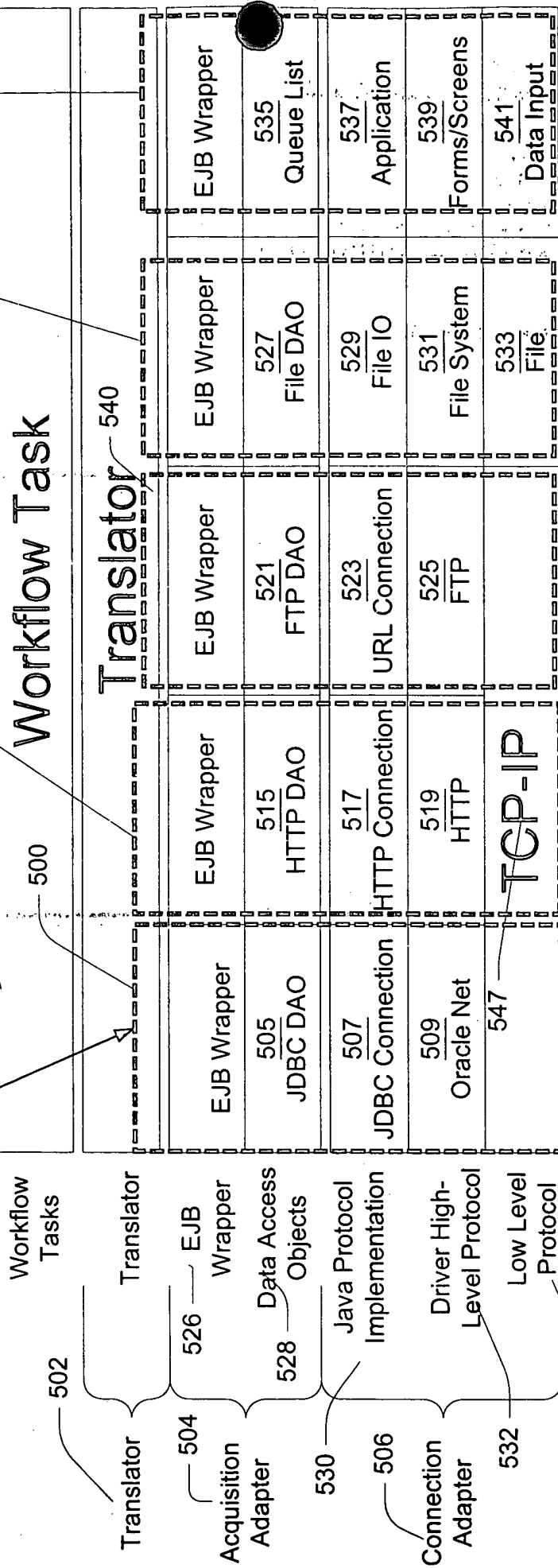
FIG. 10

FIG. 11

Logical Search Object

Workflow Task

Translator



Screen /KeyBoard

Tape

Floppy

513 Dialup

511 Fixed Line

TCP-IP

File

Oracle Net

Web Server

FTP Server

Connection

SQL Optimizer

Application Server

File System

Search Exe

541

Human

501

503

Data Store

539

521

External Data Provider

543

545

546

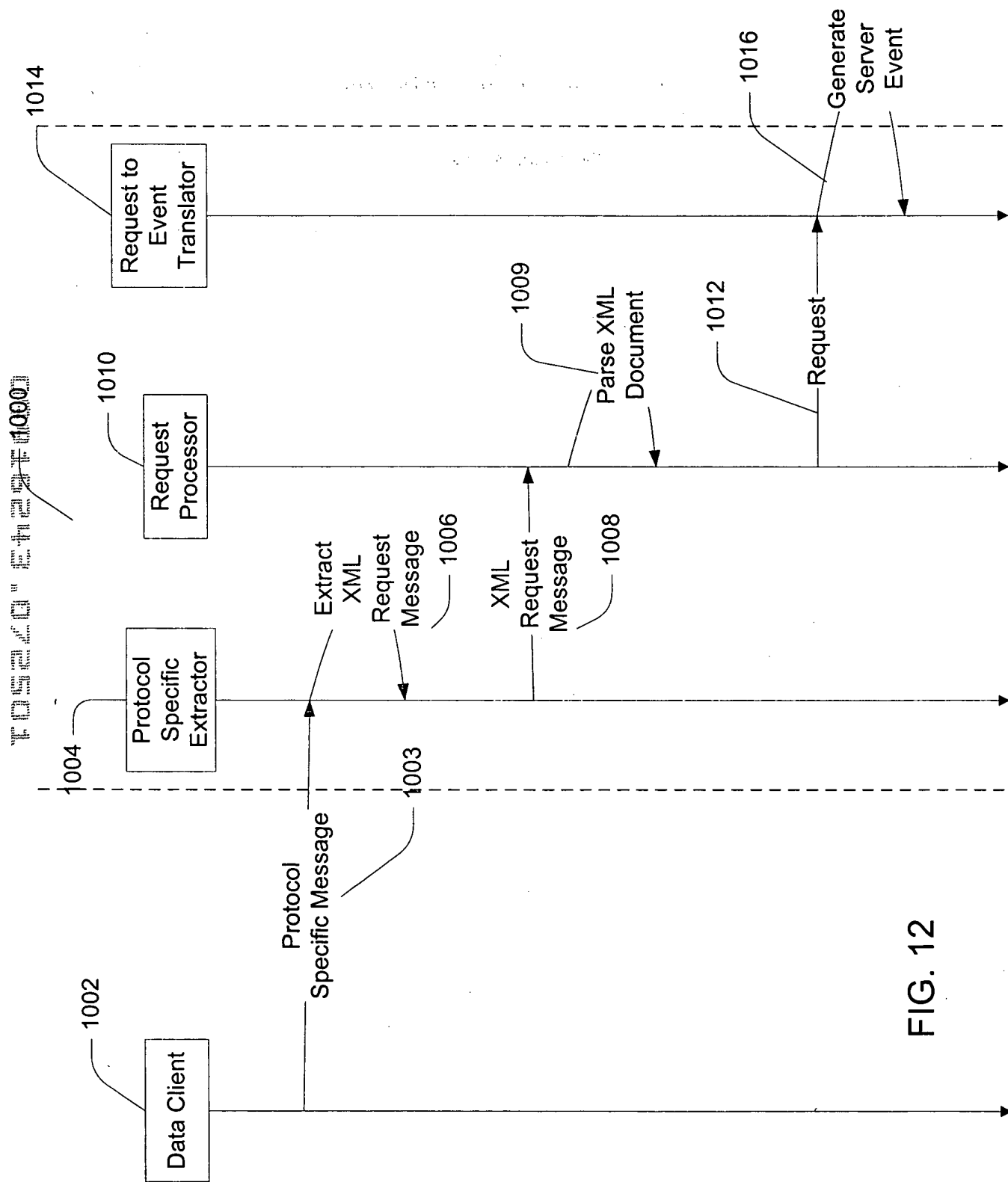
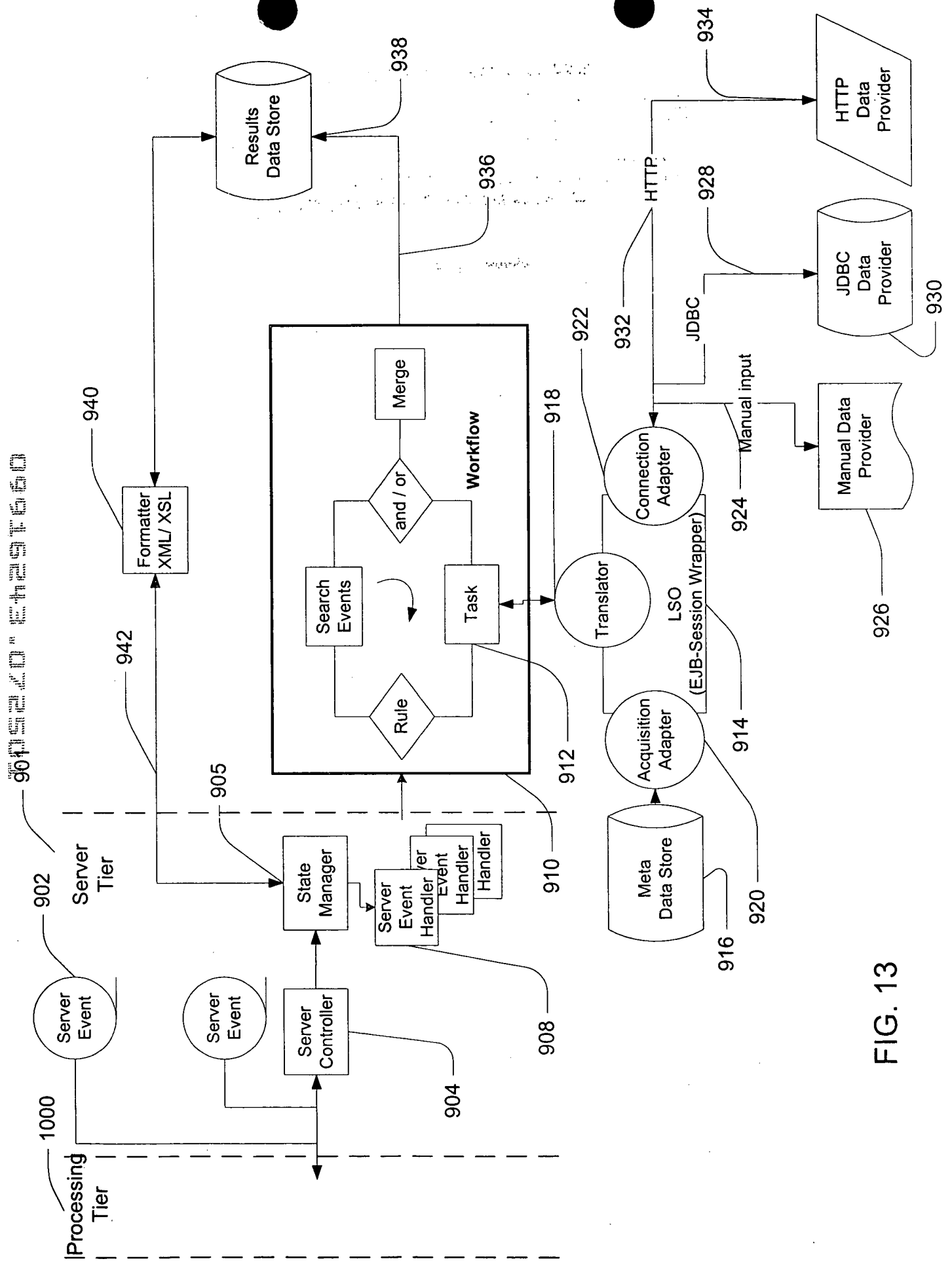


FIG. 12



Sample Service Request Message

<?xml version="1.0" encoding="UTF-8"?>
<message type="ServiceRequest" source-id="com.searchco">
 <data>
 <service-request message-id="11001100">
 <service-item sku="CSRASearch" item="1">
 <parameter name="firstname" value="John" />
 <parameter name="lastname" value="Smith" />

 <notification type="email">
 <parameter name="address"
 value="John.Smith@company.com" />
 <format style="email" />
 </notification>

 <result-format>
 <format style="csra-results" />
 </result-format>

 <results>
 </results>
 </service-item>
 </service-request>
 </data>
</message>

FIG. 14

09916343-072504

Sample Status Messages

```
<?xml version="1.0" encoding="UTF-8"?>
<message type="Status" source-id="com.searchco" >
  <data>
    <status message-id="1010010101">
      <status-request item="1" IDAS-id="394" />
      <status-request item="2" IDAS-id="488" />
      <status-request item="3" IDAS-id="506" />
      <status-request item="4" IDAS-id="13892192312" />
    </status>
  </data>
</message>
```

FIG. 15

109916243-072501

Sample Cancel Messages

```
<?xml version="1.0"?>
<message type="Cancel" source-id="searchco">
  <data>
    <cancel message-id="1234567890">
      <cancel-request item="1" IDAS-id="1234567890" />
      <cancel-request item="2" IDAS-id="2345678901" />
    </cancel>
  </data>
</message>
```

~1127

~1126

~1128

~1130

}
1132

FIG. 16

109270 8429T660

Sample Output Request Messages

<?xml version="1.0"?>
<message type="OutputRequest" source-id="searchco"> ~1134
 <data> ~1136
 <output message-id="1234567890"> ~1138
 <output-request item="1" IDAS-id="1234567890"> ~1140
 <format style="pdf" /> ~1142 }
 </output-request> 1141
 <output-request item="2" IDAS-id="2345678901">
 <format style="html" />
 </output-request>
 </output>
 </data>
</message>

105220 E429T660

FIG. 17

Sample Response Messages

Sample of a message return when a service request has been accepted.

<?xml version="1.0"?>
<message type="Response" source-id="IDAS">
 <data>
 <service-response message-id="1010010101">
 <response item="1" result="Success"
request="Order" IDAS-id="345234234">
 <response-value>Workflow started at 01:23pm
September 4th</response-value >
 </response >
 <response item="2" result="Success"
request="Order" IDAS-id="345234234">
 <response-value >Workflow started at 01:23pm
September 4th, 2001</ response-value>
 </response>
 </service-response>
 </data>
 </IDAS-message>

FIG. 18